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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,343	03/08/2001	Hiroaki Yukawa	SON-2045	4979

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EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,343

Applicant(s)

YUKAWA, HIROAKI

Examiner

Gautam R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 and 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9,10 and 17-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. DETAILED ACTION

2. Claims 1-2, 9-10, 17-29 are pending for the examination.

Election/Restriction

3. Claims 3-8 and 11-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species [spies other than figs. 8-11], there being no allowable generic or linking claim. Election was made **without traverse** in Paper No. 4.

The Applicants are urged to cancel the non-elected claims [3-8 and 11-16] and amend the inventor-ship accordingly, if necessary.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

NOTES & REMARKS

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors, for example spelling of focus etc. is wrong throughout the specification [just as it was in claims]. Applicant's cooperation is requested in correcting any errors of which Applicant may become aware in the specification.

Drawings Objection

6. The drawings are objected for following reasons:

Figures 1-7 are not designated by a legend such as "Prior Art". The legend is necessary in order to clarify what applicant's invention is (see MPEP § 608.02g).

a. Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must consist of two parts:

b. A separate letter to the Draftsman in accordance with MPEP § 608.02 (r); and;

c. A print or pen-and-ink sketch showing changes in *red ink* in accordance with MPEP § 608.02 (v).

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IMPORTANT NOTE: the print or pen-and-ink sketch with proposed corrections shown in **red ink** is required in response to this Office Action, and may not be deferred.

Specification

7. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

Claim Rejections - 35 U.S.C. § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. Claims 1-2, 9-10 and 17-29 are rejected under 35 U.S.C. § 102(e) as being anticipated by Shimano et al., US. patent 6,400,664 (hereafter Shimano).

As to claim 1, Shimano, discloses the invention as claimed [see Figs. 1-23, especially 20-22] including a first light source, a second light source, an objective lens, a photodetector and a diffraction element, comprising:

a first light source [fig. 20, unit 2001] for emitting a first light beam having a first wavelength [650 nm];

a second light source [fig. 20, unit 2002] for emitting a second light beam having a second wavelength [780 nm] different from the first wavelength;

an objective lens [fig. 20, unit 2008] for focusing said first light beam or said second light beam to the signal recording surface of an optical recording medium of a first type matching to the first wavelength or that of an optical recording medium of a second type matching to the second wavelength, whichever appropriate;

a photodetector [fig. 20, unit 2010] for detecting the light beam focused on the signal recording surface of the optical recording medium of the first type or that of the optical recording medium of the second type, whichever appropriate, by the objective lens and reflected by the signal recording surface; and

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a diffraction element [fig. 20, unit 2101] arranged in the light path from the light sources to the photodetector by way of one of the first or second type of optical recording medium; at least either the first light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the first type and reflected by the reflecting surface or the second light beam adapted to be used for reading information signals from the signal recording surface of the optical recording medium of the second type and reflected by the reflecting surface being diffracted by the diffraction element, the first reflected light beam and the second reflected light beam being focused to a same spot on the light receiving surface of the photodetector [col. 19, line 56 to col. 20, line 54].

10. As to claim 2, it is rejected for same reasons as set forth in the rejection of claim 1, *supra*.

11. As to claim 9, it is rejected for similar reasons as set forth in the rejection of claim 1, *supra*. As to added limitations of:

Rotary operating mechanism [motor] for driving one or more than one optical disc operating so many pieces of optical recording medium as to rotate [motors for driving discs are inherently present in these kind of recording devices; and

An optical pickup device [fig. 20] arranged opposite to the signal recording surfaces of one or more than one optical discs driven to rotate by said rotary operating mechanism [motors are inherently placed on the opposite side of the optical head, so as not to interfere with recording and reading.

12. As to claim 10, it is rejected for same reasons as set forth in the rejection of claim 9, *supra*.

13. As to claims 17, 20, 23 and 26 Shimano discloses:
the diffraction element generates a pair of sub-beams from the first reflected light beam and the second reflected light beam, where applicable [col. 20, lines 41-54].

14. As to claims 18, 21, 24 and 27 Shimano discloses:
the diffraction element includes a diffraction grating pattern on one of the opposite side surfaces of a plate [this inherently done because of two wavelengths] [col. 20, lines 18-54].

15. As to claims 19, 22, 25 and 28 Shimano discloses:
the diffraction grating pattern is a blazed grating design [curvilinear] [col. 20, lines 18-54].

16. As to claim 29, it is rejected for same reasons as set forth in the rejection of claim 9, *supra*.

Other prior art cited

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Faklis et al. (US. Patent 5,589,982) "Polychromatic diffractive lens".
- b. Nakajima et al. (US. Patent 5,541,909) "Optical disc with phase pits ...".
- c. Tumerman (US. Patent 4,309,110) "Method and apparatus for ..".
- d. Ohyama et al. (US. Patent 6,512,608) "Optical device".
- e. Takeshita et al. (US. Patent 6,510,119) "Optical head device"
- f. Blasiak et al. (US. Patent 6,067,197) "Diffraction grating ...".
- g. Dixon et al. (US. Patent 6,072,624) "Apparatus and method for scanning laser ..".
- h. Sweatt (US. Patent 6,262,845) "Apparatus and method for generating partially coherent ...".
- i. Miyake et al. (US. Patent 5,253,237) "Optical head device"
- j. Akihiro (US. Patent 6,407,815) "Optical displacement ...".

Contact information

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

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Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.

Gautam R. Patel
Patent Examiner
Group Art Unit 2655

A handwritten signature in black ink, appearing to read "Gautam R. Patel", with a horizontal line drawn underneath the signature.

July 17, 2003